

- [54] **METHODS USING ELECTROPHORETICALLY DEPOSITED PATTERNABLE MATERIAL**
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- [58] **Field of Search** **204/485, 490**

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[57] **ABSTRACT**

Methods for use in the production of a display include providing a substrate assembly of a face plate of the display including a conductive surface at a first side thereof. One or more projections extend from the first side of substrate assembly. A patternable material, e.g., electrophoretically depositable resist, is electrophoretically deposited on at least the conductive surface and adjacent the projections, e.g., spacers such as nonconductive spacers or spacers that have at least portions thereof that are slightly conductive. The method may further include patterning the patternable material for use in deposition of light emitting elements on the conductive surface. Light emitting elements of one or more colors may be formed. In addition, the substrate assembly including the conductive surface may have one or more nonconductive regions formed on the conductive surface; the one or more nonconductive regions having a predetermined thickness. A layer of patternable material is formed by electrophoresis over the conductive surface and over the one or more nonconductive regions. Such patternable material may then be patterned and used in formation of light emitting elements. Further, structures used in the production of a face plate of a display are also provided.

21 Claims, 12 Drawing Sheets

